# 15. PORT TOWNSEND-KEYSTONE

The Port Townsend – Keystone connects the Olympic Peninsula with central Whidbey Island via a 4.3 nautical mile crossing and has an approximate crossing time of 30 minutes. Daily ridership averages 1,290 passengers and 1,064 vehicles/drivers for a total daily average of 2,354. Ridership during the month of May 1999 when the survey was conducted averaged 2,380 per day.

Key trip making information and geographic travel patterns for patrons of this route are presented herein. Additional route-specific survey tabulations and results for all three survey periods, including ferry user demographic information, can be found in Appendix B.

# 15.1 TRIP MAKING INFORMATION

### 15.1.1 Weekday Trip Statistics

Weekday trip statistics presented here are grouped into three topics:

- Trip purpose and usage frequency;
- Travel modes and round-trip patterns; and
- Desired transit improvements.

Key trip making information and geographic travel patterns for patrons of this route is presented herein. The focus of these results is primarily on the PM peak survey period, contrasting the peak results with the PM non-peak period for key items such as trip purpose and wait times.

### **Trip Purpose**

Riders in the weekday PM peak period have a relatively even split between the three trip purpose categories, as shown in Table 15-1. While recreational use is still the highest percentage, reflecting the tourist orientation of Port Townsend, Whidbey Island, and the surrounding areas, it has decreased since the 1993 survey. Respondents to the 1993 survey reported nearly 70% recreational travel, whereas riders reported recreational or personal travel approximately 62% of the time for the 1999 survey. Work/school commute or business-related travel has increased from about 27% of travel in 1993 to approximately 38% of PM peak period travel in 1999.

"Commute or business related travel has increased from about 27% of travel in 1993 to approximately 38% of PM peak period travel in 1999"

Table 15-2 shows trip purpose and frequency distribution for weekday PM non-peak travelers. Nearly 75% of PM non-peak riders reported they were using the ferry for recreational or personal travel. The majority of PM non-peak travelers do not use the ferry as frequently as PM peak period riders. Eighty-seven percent of riders during the PM non-

peak period reported 5 or fewer rides in the past 7 days. In contrast, only 60% of PM peak period riders reported 5 or fewer rides in the past 7 days, with nearly 20% reporting 10 or more rides. Not surprisingly, most riders travelling for work/school or business related purposes were those who were using the ferry frequently, with a majority reporting they used the ferry 10 or more times in the past 7 days. These changes perhaps reflect a growing number of persons choosing to live further away from work locations or an expanding economic market in north Jefferson County and Island County.

Table 15-1
Trip Purpose and Frequency of Use Distribution
Port Townsend-Keystone — Weekday PM Peak Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	10.1%	34.7%	24.1%	20.9%	94
2 to 5 Rides in Past 7 Days	27.4%	39.3%	48.2%	38.6%	174
6 to 9 Rides in Past 7 Days	8.9%	9.6%	12.8%	10.7%	48
10 or More Rides in Past 7 Days	48.1%	0.0%	2.7%	19.3%	87
No Answer	5.5%	16.4%	12.2%	10.5%	47
Totals	100.0%	100.0%	100.0%	100.0%	450
Overall Trip Purpose Distribution	37.8%	19.7%	42.5%	100.0%	
Expanded Ridership	170	89	191	450	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 15-2
Trip Purpose and Frequency of Use Distribution
Port Townsend-Keystone — Weekday PM Non-Peak Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Expanded Ridership Total
1st Ride in Past 7 Days*	50.3%	57.7%	28.8%	38.4%	134
2 to 5 Rides in Past 7 Days	30.1%	36.8%	59.6%	48.6%	169
6 to 9 Rides in Past 7 Days	1.5%	0.0%	3.0%	2.2%	8
10 or More Rides in Past 7 Days	15.7%	0.0%	1.2%	5.0%	17
No Answer	2.5%	5.5%	7.4%	5.8%	20
Totals	100.0%	100.0%	100.0%	100.0%	349
Overall Trip Purpose Distribution	27.5%	12.7%	59.8%	100.0%	
Expanded Ridership	96	44	209	349	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

Table 15-3, shown below, shows the origin and destination types by direction for the weekday PM peak period for the Port Townsend – Keystone route. The directional split is relatively balanced with slightly more passengers travelling in the westbound direction. The most predominate origin and destination type pair is "other to home" at 36% of the total for both directions. In the westbound direction, most riders are either coming from work and going to home, at 29%, or coming from some other place and going home, at 36%. The "other to home" trip types in the eastbound direction represent the majority of trips, at 44%. Representing the recreational nature of this route, the "other to other" trips comprise approximately 20% of all trips in both directions.

Table 15-3
Trip Origin and Destination Types by Direction
Port Townsend-Keystone — Weekday PM Peak Period

Origin & Destina	ntion Types	Destination	Shares Across	All Origins:	Expanded
Origin	Destination	Eastbound	Westbound	Both	Ridership
Place	Place	Trips	Trips	Directions	Total
Home	Home	1.3%	1.4%	1.3%	6
	Work/School	4.5%	0.7%	2.4%	11
	Other	8.2%	11.6%	10.1%	45
Work/School	Home	16.6%	29.0%	23.5%	106
	Work/School	0.0%	3.4%	1.9%	8
	Other	6.6%	3.4%	4.8%	22
Other	Home	43.5%	30.1%	36.1%	162
	Work/School	0.0%	0.7%	0.4%	2
	Other	19.3%	19.8%	19.6%	88
Totals Travel Directio		100.0% 44.9%	100.0% 55.1%	100.0% 100.0%	450
Expanded Ride	ership	202	248	450	

# Travel Modes and Round-Trip Patterns

Weekday PM peak period round trip patterns on the Port Townsend – Keystone route are shown in Table 15-4. Some interesting round-trip patterns seem to be occurring on the Port Townsend – Keystone route. While nearly 70% of riders on the second-half of their round-trip reported they were returning on the same day, as would be expected, just over 70% of riders on the first-half of their round-trip reported they would be returning on a different day, slightly higher than was found for other routes. This finding is again probably related to the tourism associated with this route, as well as its removed location, which could influence riders to make less frequent but trips of longer duration.

Table 15-4
Round-Trip Patterns and Methods
Port Townsend-Keystone — Weekday PM Peak Period

Round-Trip Segment & Method / Time	Today	Some Other Day	No Answer	Expanded Ridership
Declared Initial Trip				68.0%
(Reported on 2nd Half of Round-Trip)				
Same Ferry Route	56.6%	7.6%	8.6%	223
Not Using Ferry System	4.8%	5.2%	0.9%	33
Different Ferry Route	7.3%	2.5%	0.9%	33
No Answer	1.1%	0.0%	4.5%	17
Total Declared Initial Trip	69.9%	15.3%	14.8%	306
Expected Return Trip				24.7%
(Reported on 1st Half of Round-Trip)				
Same Ferry Route	12.1%	51.4%	7.7%	79
Not Using Ferry System	3.0%	7.2%	3.0%	15
Different Ferry Route	0.0%	10.0%	0.0%	11
No Answer	0.0%	2.4%	3.1%	6
Total Expected Return Trip	15.2%	71.0%	13.8%	111
No Answer				7.3%
(Did Not Report Round-Trip Status)				
No Answer			100.0%	33
Expanded Ridership Total	231	126	94	450

Access and egress mode shares and boarding mode distributions from the 1993 survey were modified to approximate 1999 Travel Survey methods and data collection procedures for comparison purposes. However, the 1993 results are not directly comparable to the expanded survey results based upon the data collected in 1999. Please see Section 3.5.2 in Chapter 3 for a detailed explanation of these procedures. These modified percentages can nonetheless be used for generalized comparisons, as presented in the following discussion.

Boarding information and access and egress information for PM peak period riders on the Port Townsend – Keystone route is shown in Table 15-5. This route has one of the lowest percentages of walk-on passengers in the WSF system at 8%, which is not surprising, due to its removed geographic location and distance from other cities and towns. The percentage of vehicle drivers or passengers is quite high at 92% of PM peak period ridership. The mode split statistics are similar to findings from the 1993 survey, with a large majority of passengers boarding in a vehicle and less than 10% as walk-on passengers.

Of those ferry riders who walked on board, the overwhelming majority accessed the ferry terminal by vehicle. This is also true for the egress mode, but there were about 30% who walked or biked to their final destination, compared to about 9% who accessed by walking or biking. Those persons who arrived and departed by bus comprised about 4% each. Overall, the distribution of access, egress and boarding modes from the 1999 survey results were similar to those from the 1993 survey results.

Table 15-5

Access Mode to Ferry — Boarding Method — Egress Mode from Ferry
Port Townsend-Keystone — Weekday PM Peak Period

Access Mode to Ferry Terminal	Percent Distrib.	Boarding Method	Percent Distrib.	Mode Shares	Egress Mode from Ferry Terminal	Percent Distrib.
Pedestrian/Bicycle	8.6%	Walked-On		8.2%	Pedestrian/Bicycle	30.4%
By Vehicle*	87.0%	Pedestrian	95.7%		By Vehicle*	65.3%
By Bus or Shuttle	4.3%	Pedestrian w/ Bicycle	4.3%		By Bus or Shuttle	4.3%
Total	100.0%	Total	100.0%		Total	100.0%
In-Vehicle	100.0%	In-Vehicle		91.8%	In-Vehicle	100.0%
		Vehicle Drivers*	53.8%			
		Vehicle Passengers	46.2%			
		Total	100.0%			
		Total		100.0%		
		Expanded Ridership Total		450		

<sup>\*</sup> includes motorcycles

Wait time distribution by boarding mode is presented for weekday PM peak period riders and PM non-peak period riders in Table 15-6 and Table 15-7 respectively. The typical wait time experienced by walk-on passengers for both the PM peak period and the PM non-peak period is quite similar, with about 50% boarding the ferry in 10 minutes or less. About 53% of ferry passengers boarding in a vehicle reported slightly longer waiting times of eleven to thirty minutes. However, the majority of all travelers, regardless of boarding mode, were able to board a ferry on the Port Townsend – Keystone route in 30 minutes or less.

Table 15-6 Wait Time Distribution by Boarding Method Port Townsend-Keystone — Weekday PM Peak Period

Wait Time Category / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Expanded Ridership Total
Zero to 10 Minutes	47.8%	23.3%	114
11 to 30 Minutes	39.1%	53.8%	237
31 to 60 Minutes	8.8%	13.2%	58
61 to 90 Minutes	0.0%	3.7%	15
More Than 90 Minutes	4.3%	2.5%	12
No Answer	0.0%	3.5%	15
Totals	100.0%	100.0%	
Expanded Ridership	37	413	450

Table 15-7
Wait Time Distribution by Boarding Method
Port Townsend-Keystone — Weekday PM Non-Peak Period

Wait Time Category / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Expanded Ridership Total
Zero to 10 Minutes	50.2%	28.4%	104
11 to 30 Minutes	36.5%	52.8%	180
31 to 60 Minutes	4.4%	11.9%	40
61 to 90 Minutes	4.4%	0.0%	1
More Than 90 Minutes	0.0%	3.5%	12
No Answer	4.4%	3.4%	12
Totals	100.0%	100.0%	
Expanded Ridership	22	327	349

Table 15-8 shows parking statistics for walk-on boardings during the weekday PM peak period. Parking statistics for walk-on passengers were not very insightful as most respondents did not supply enough information. However, it appears that of those persons parking a vehicle, most are parking for free on at least one side (48%) or both sides (17%).

Table 15-8
Walk-Board Passenger Parking Statistics
Port Townsend-Keystone — Weekday PM Peak Period

Reported Parking Characteristics	Expanded Ridership	Percent of Total	Average Total Parking Paid*
Used Paid Parking on Both Sides	0	0.0%	N/A
Used Paid Parking One Side & Free Parking Other Side	0	0.0%	N/A
Used Free Parking on Both Sides	6	17.4%	\$0.00
Paid Parking One Side & Did Not Park Other Side or Insufficient Information	0	0.0%	N/A
Free Parking One Side & Did Not Park Other Side or Insufficient Information	18	48.0%	\$0.00
Did Not Park on Either Side or Insufficient Parking Information	13	34.6%	NA
Totals	37	100.0%	

<sup>\*</sup>Only surveys with a reported dollar amount paid for parking were included in the average cost calculation (those with free parking were excluded).

### **Desired Transit Improvements**

Table 15-9 and Table 15-10 show the desired transit improvements reported by riders for the PM peak period and the PM non-peak periods, respectively. The most common response of riders in both periods was a desire for transit service within 2 blocks of their origin or destination. The second most common improvement was a desire for transit service at both ends of the ferry route, also reported by riders in both periods. The most frequent write-in comment for both periods was lower or free park and ride fees.

Table 15-9
Transit Improvements Desired
Port Townsend-Keystone — Weekday PM Peak Period

Transit Improvement	Distribution	Expanded Ridership
Service within 2 Blocks of Origin or Destination	23.6%	106
Service at Both Ends of Ferry Route	14.7%	66
Seamless Connection between Ferry & Bus	5.4%	24
Employer Paid or Subsidized Bus Pass	2.1%	10
More Park & Ride Lots/Spaces Available	9.0%	40
None of the Above/No Answer	35.0%	157
Frequent Write-In Comments		
More Passenger Only Service	1.9%	8
Lower Park & Ride Parking Fees/Free	6.1%	28
More Park & Ride Information	1.9%	9
"Other" Comments	0.4%	2
Totals	100.0%	450

Table 15-10
Transit Improvements Desired
Port Townsend-Keystone — Weekday PM Non-Peak Period

Transit Improvement	Distribution	Expanded Ridership
Service within 2 Blocks of Origin or Destination	20.7%	72
Service at Both Ends of Ferry Route	13.9%	49
Seamless Connection between Ferry & Bus	2.0%	7
Employer Paid or Subsidized Bus Pass	0.7%	2
More Park & Ride Lots/Spaces Available	7.0%	24
None of the Above/No Answer	46.3%	162
Frequent Write-In Comments		
More Passenger Only Service	1.4%	5
Lower Park & Ride Parking Fees/Free	5.5%	19
More Park & Ride Information	2.5%	9
"Other" Comments	0.0%	0
Totals	100.0%	349

### 15.1.2 Sunday Trip Statistics

Sunday trip statistics presented here are grouped into two categories:

- Trip purpose and usage frequency; and
- Travel modes and round-trip patterns.

### **Trip Purpose**

Trip purpose and frequency of use information is presented in Table 15-11 for the Sunday survey period. About three quarters of the respondents during the Sunday survey period indicated a trip purpose of social/recreational/shopping or sightseeing. Comparing the results of the 1999 and 1993 surveys requires the addition of personal travel to social and recreational travel to equal the trip purpose categories of 1993, however when done the two are very similar at about 85% of all Sunday survey period trips. Ridership frequency for respondents of the Sunday survey period is quite similar to riders during the PM non-peak period, with about 88% reporting five or fewer rides in the last 7 days.

Table 15-11
Trip Purpose and Frequency of Use Distribution
Port Townsend-Keystone — Sunday Survey Period

Frequency of Use / Trip Purpose	Work/School/ Business Related	Medical Appt./ Personal Business/ Other	Social/ Recreational/ Shopping/ Sight-seeing	All Trip Purposes	Usable Responses
1st Ride in Past 7 Days*	16.1%	21.4%	23.3%	22.1%	96
2 to 5 Rides in Past 7 Days	69.6%	60.7%	66.5%	66.1%	287
6 to 9 Rides in Past 7 Days	7.1%	5.4%	2.8%	3.7%	16
10 or More Rides in Past 7 Days	5.4%	5.4%	2.8%	3.5%	15
No Answer	1.8%	7.1%	4.7%	4.6%	20
Totals	100.0%	100.0%	100.0%	100.0%	434
Overall Trip Purpose Distribution	12.9%	12.9%	74.2%	100.0%	
Usable Responses	56	56	322	434	

<sup>\* 1</sup>st Ride in Past 7 Days includes passengers who answered: 1st ride in past year and 1st ride ever.

### **Travel Modes and Round-Trip Patterns**

Sunday survey period respondent round trip patterns for the Port Townsend – Keystone route are shown in Table 15-12. Clearly the high share of recreational trips has affected the round-trip patterns of respondents. Over half of the respondents, regardless of round-trip status reported they would complete their trip on some other day. Approximately 60% of Sunday survey period riders reporting on the first half of a round-trip stated they traveled on some other day, while those predicting travel methods on the second half of a round trip were fairly evenly split between a same day return and returning on some other day at 46% and 41%, respectively.

Table 15-12
Round-Trip Patterns and Methods
Port Townsend-Keystone — Sunday Survey Period

Round-Trip Segment & Method / Time	Today	Some Other Day	No Answer	Usable Responses
Declared Initial Trip				76.3%
(Reported on 2nd Half of Round-Trip)				
Same Ferry Route	19.0%	48.3%	11.2%	260
Not Using Ferry System	1.5%	3.3%	0.0%	16
Different Ferry Route	6.0%	7.9%	0.0%	46
No Answer	0.0%	1.2%	1.5%	9
Total Declared Initial Trip	26.6%	60.7%	12.7%	331
Expected Return Trip				20.0%
(Reported on 1st Half of Round-Trip)				
Same Ferry Route	34.5%	28.7%	8.0%	62
Not Using Ferry System	2.3%	5.7%	1.1%	8
Different Ferry Route	6.9%	3.4%	0.0%	9
No Answer	2.3%	3.4%	3.4%	8
Total Expected Return Trip	46.0%	41.4%	12.6%	87
No Answer				3.7%
(Did Not Report Round-Trip Status)				
No Answer			100.0%	16
Usable Responses	128	237	69	434

Wait time distribution by boarding method for Sunday survey period respondents is presented in Table 15-13. Typically, walk-on respondents during the Sunday survey period waited longer to board the ferry than their counterparts during the weekday PM peak and PM non-peak periods. Generally, there were fewer respondents waiting only zero to 10 minutes to board, while a larger proportion waited eleven to thirty minutes. Respondents boarding the ferry in a vehicle reported longer wait times on Sunday than riders in the weekday PM peak and PM non-peak periods. The number of respondents reporting they waited between 31 to 60 minutes increased from about 12% for weekday riders to approximately 22% for Sunday survey period respondents.

Table 15-13
Wait Time Distribution by Boarding Method
Port Townsend-Keystone — Sunday Survey Period

Wait Time Distribution / Boarding Method	Walk Board (Pedestrian & Bicycle)	Vehicle Board (Driver & Passenger)	Usable Responses
Zero to 10 Minutes	40.9%	16.7%	83
11 to 30 Minutes	50.0%	50.8%	220
31 to 60 Minutes	4.5%	22.1%	88
61 to 90 Minutes	0.0%	3.3%	13
More Than 90 Minutes	0.0%	0.8%	3
No Answer	4.5%	6.4%	27
Totals	100.0%	100.0%	
Usable Responses	44	390	434

#### 15.2 GEOGRAPHIC TRAVEL PATTERNS

This section provides tables and map figures which present the locations for ferry user trip origins and destinations. Of key interest for updating the WSF travel demand forecasting model are the PM peak period origin-destination (O-D) trip tables by travel direction, presented as expanded PM peak ridership volumes and distributions for all modes, as well as for walk-on and in-vehicle boardings. Similar O-D trip tables presenting unexpanded Sunday survey period distributions are also provided. Complementing the PM peak and Sunday trip tables are two sets of map figures. The first set shows the geographic flows of origins and destinations, including route district percentage distributions, for all trips by direction. The second set of maps illustrates the directional densities of trip origins and destinations, using different pinpoint symbols to delineate walk-on and in-vehicle boarding methods.

### 15.2.1 Weekday PM Peak Period Trip Patterns

Table 15-14 summarizes origin and destination locations for westbound weekday PM peak period ridership and Figure 15-1 provides an illustration of the origin and destination locations by boarding mode. Not surprisingly, the largest percentage of riders have destinations in Port Townsend or areas in northeast Jefferson County, with each region attaining about 16% shares. However, there is a considerable share of riders in the PM peak period who are traveling south and west to Bremerton, north Kitsap County and Clallam County. The greatest share of riders have origins in Whidbey Island, particularly north Whidbey Island, and over 20% have origins in either the Anacortes/Fidalgo Island or west

Skagit County districts. In general, these findings are similar to those found in the 1993 survey, but with far fewer trips originating in the San Juan's and considerably more trips originating in north Whidbey Island. While the origins appear to have become more concentrated, westbound destinations have become more disperse, with a much lower percentage destined for the immediate Port Townsend area (50% in 1993 compared to 16% in 1999).

"... Westbound destinations have become be more disperse, with a much lower percentage of riders destined for the immediate Port Townsend area (50% in 1993)"

In the eastbound direction, Table 15-15 summarizes origin and destination locations for the weekday PM peak period ridership and Figure 15-2 graphically displays this information. Eastbound travel is generally the reverse of westbound travel, particularly for those areas closest to Port Townsend. Port Townsend and northeast Jefferson County comprise approximately 32% of eastbound rider origins. Bremerton makes up about 10% of rider origins, likely due to the work on the USS Abraham. However, most surprising is the percentage of origins in "all other places," which total approximately 34% of eastbound riders. This may be related to the tourist orientation of this route or it could be the result of people choosing to avoid driving on I-5 through Seattle to Whidbey Island and locations north of Snohomish County. These results are generally similar to the findings of the 1993 survey.

The westbound walk-on and in-vehicle boarding origin and destination locations are shown in Table 15-16 and Table 15-17, respectively. As shown in Figure 15-3 walk-on passengers have a smaller range of origin and destination locations than do in-vehicle passengers. Typically, most walk-on passengers remain in Port Townsend or in central or north Whidbey Island. In contrast, there is a considerable number of passengers who boarded in a vehicle that show destinations in central Kitsap County and origins north of Whidbey Island.

In the eastbound direction, both walk-on passengers and in-vehicle passengers have a much smaller range of origin and destination locations. Table 15-18 and Table 15-19 show origin and destination locations for eastbound travelers, respectively. As can be seen in Figure 15-4 most walk-on and in-vehicle riders have origins in Port Townsend and destinations in either central or north Whidbey Island.

Table 15-14
Port Townsend-Keystone O-D Trip Table
Weekday PM Peak Period — Westbound — All Boarding Modes

											0			
ORIGIN	DESTINATION	1201 Port Townsend	55 Other Northeast Jefferson County	Sort Angeles	90.2 Sequim/Other East Clallam County	1705 West Olympic Peninsula	90.1 Worth Kitsap County	US Greater Bremerton	25 80 Other Central Kitsap County	66 South Kitsap County	01 Mason/West Pierce Counties	For All Other Places	Origin Totals	Origin Shares
South Whidbey Island	1711				2								2	0.7%
Central Whidbey Island	1712	5	8		2				3				18	7.7%
North Whidbey Island	1713	12	15		2		2	17	12	25	3	15	103	43.2%
Greater Everett/Lynnwood	1714		2		3								5	2.2%
Other West Snohomish County/Camano Island	1715				5								5	2.1%
Anacortes/Fidalgo Island	1718	10		2			14						25	10.7%
Other West Skagit County	1719	3	5		7		5	5	2				27	11.3%
San Juan County	1720		2					2					3	1.4%
West Whatcom County	1721	2	5	7	7	3	2	2				2	29	12.1%
Vancouver, BC	1722			9								5	14	5.7%
All Other Places	1724	5			2								7	2.9%
Destination Totals		37	37	17	29	3	22	25	17	25	3	22	238	100.0%
Destination Shares		15.5%	15.5%	7.2%	12.0%	1.4%	9.3%	10.7%	7.1%	10.7%	1.4%	9.2%	100.0%	//

Figure 15-1
Port Townsend - Keystone Westbound PM Peak Trips
All Boarding Modes

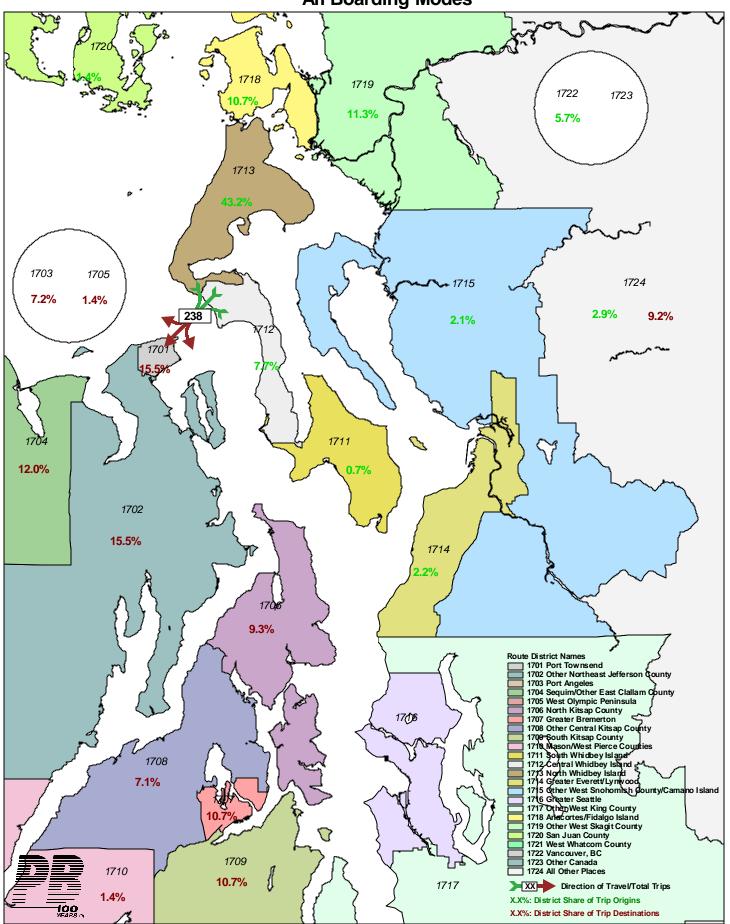


Table 15-15 Port Townsend-Keystone O-D Trip Table Weekday PM Peak Period — Eastbound — All Boarding Modes

ORIGIN	DESTINATION	South Whidbey Island	The Central Whidbey Island	S 1713	Other West Snohomish County/Camano Island	Uther West King County	8 Anacortes/Fidalgo Island	6 Other West Skagit County	San Juan County	West Whatcom County	Vancouver, BC	721 Tother Places	Origin Totals	Origin Shares
Port Townsend	1701		3		9	3	9			3	3	3	31	16.7%
Other Northeast Jefferson County	1702		3	6		9			9		3		28	15.3%
Port Angeles	1703						3				3		5	2.9%
Sequim/Other East Clallam County	1704			6									6	3.2%
West Olympic Peninsula	1705						9	3					11	6.1%
Greater Bremerton	1707	3	5	11									19	10.0%
Other Central Kitsap County	1708			12									12	6.4%
South Kitsap County	1709	3											3	1.4%
Mason/West Pierce Counties	1710	3						3		3			8	4.3%
All Other Places	1724		35	15						13			63	33.8%
Destination Totals		8	46	49	9	11	20	5	9	19	8	3	185	100.0%
Destination Shares		4.3%	24.9%	26.3%	4.6%	6.1%	10.7%	2.9%	4.6%	10.0%	4.3%	1.4%	100.0%	

Figure 15-2
Port Townsend - Keystone Eastbound PM Peak Trips
All Boarding Modes

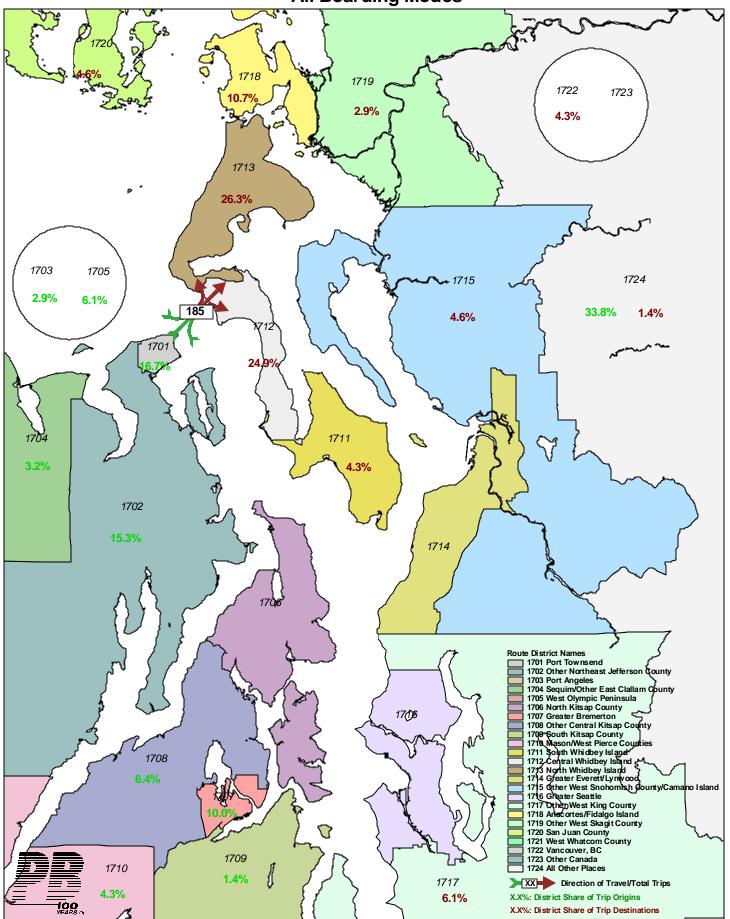


Table 15-16
Port Townsend-Keystone O-D Trip Table
Weekday PM Peak Period — Westbound — Walk-On Boardings

ORIGIN	DESTINATION	1701 Port Townsend	25 Other Northeast Jefferson County	12 Sequim/Other East Clallam County	Origin Totals	Origin Shares
Central Whidbey Island	1712	3	2	2	6	26.7%
North Whidbey Island	1713	3	6	2	11	46.7%
Other West Skagit County	1719	3	2		5	20.0%
West Whatcom County	1721			2	2	6.7%
Destination Totals		10	10	5	24	100.0%
Destination Shares		40.0%	40.0%	20.0%	100.0%	

Table 15-17
Port Townsend-Keystone O-D Trip Table
Weekday PM Peak Period — Westbound — In-Vehicle Boardings

ORIGIN	DESTINATION	1401 Port Townsend	COUNTY Of the Northeast Jefferson County	Port Angeles	Pour Sequim/Other East Clallam County	1705 West Olympic Peninsula	90.11 North Kitsap County	Creater Bremerton	80 Other Central Kitsap County	66 South Kitsap County	01.21 Mason/West Pierce Counties	P521 All Other Places	Origin Totals	Origin Shares
South Whidbey Island	1711				2								2	0.8%
Central Whidbey Island	1712	2	7						3				12	5.6%
North Whidbey Island	1713	9	8				2	17	12	25	3	15	92	42.8%
Greater Everett/Lynnwood	1714		2		3								5	2.4%
Other West Snohomish County/Camano Island	1715				5								5	2.4%
Anacortes/Fidalgo Island	1718	10		2			14						25	11.9%
Other West Skagit County	1719		3		7		5	5	2				22	10.3%
San Juan County	1720		2					2					3	1.6%
West Whatcom County	1721	2	5	7	5	3	2	2				2	27	12.7%
Vancouver, BC	1722			9								5	14	6.4%
All Other Places	1724	5			2								7	3.2%
Destination Totals		27	27	17	24	3	22	25	17	25	3	22	214	100.0%
Destination Shares		12.7%	12.7%	8.0%	11.1%	1.6%	10.3%	11.9%	7.9%	11.9%	1.6%	10.3%	100.0%	

Figure 15-3
Port Townsend - Keystone Westbound PM Peak Period
Trip Origins & Destinations by Boarding Mode

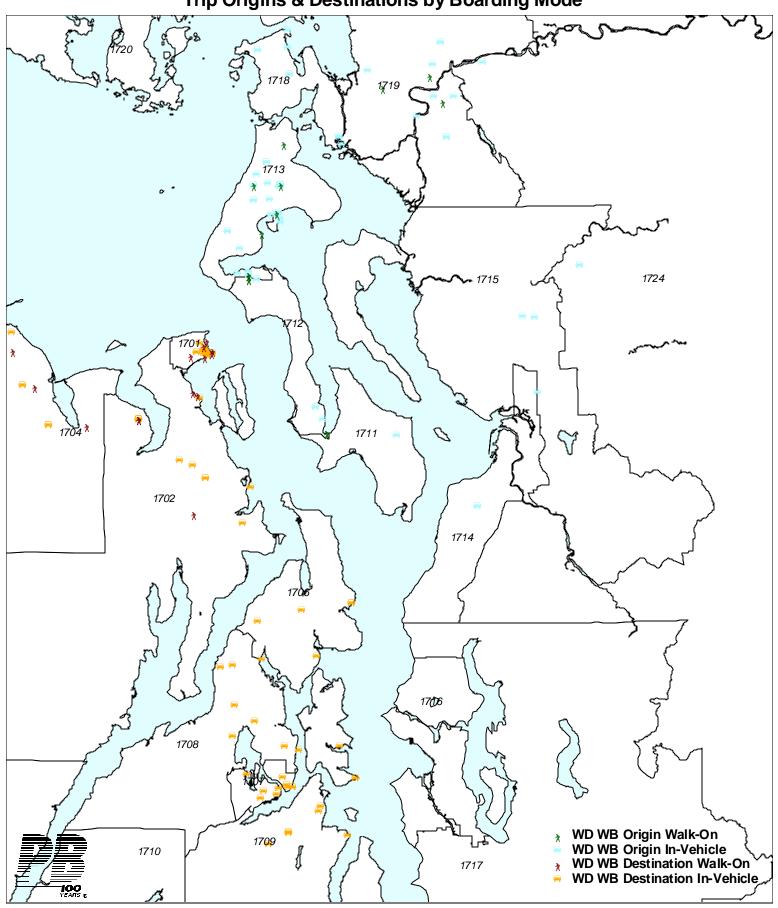


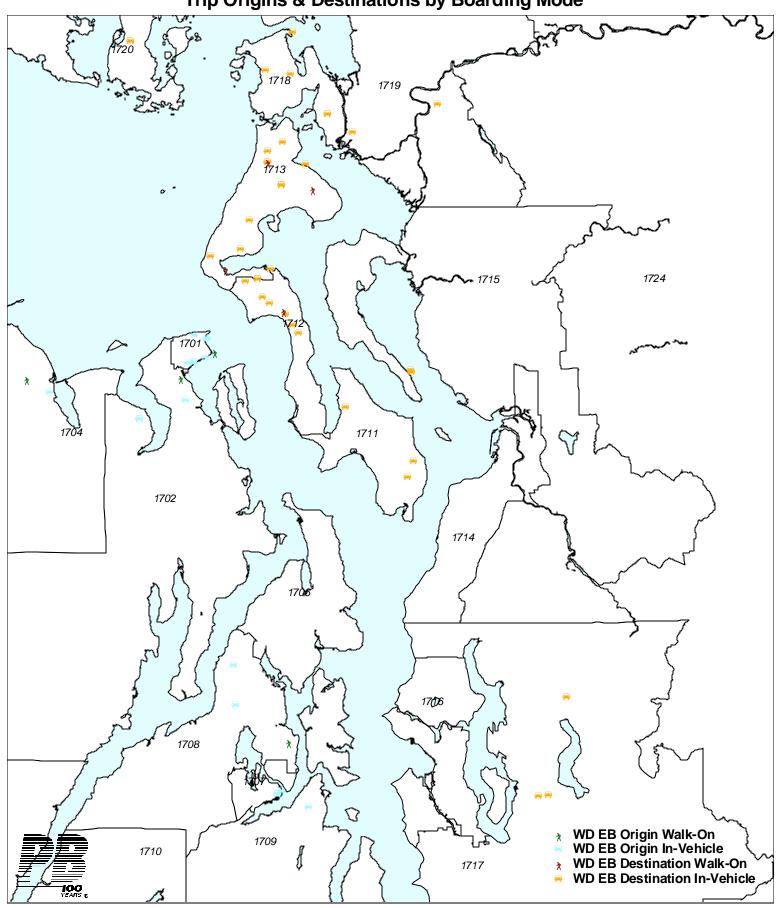
Table 15-18
Port Townsend-Keystone O-D Trip Table
Weekday PM Peak Period — Eastbound — Walk-On Boardings

ORIGIN	DESTINATION	12. Central Whidbey Island	Unorth Whidbey Island	Origin Totals	Origin Shares
Port Townsend	1701	3		3	25.0%
Other Northeast Jefferson County	1702		3	3	25.0%
Sequim/Other East Clallam County	1704		3	3	25.0%
Other Central Kitsap County	1708		3	3	25.0%
Destination Totals		3	10	13	100.0%
Destination Shares		25.0%	75.0%	100.0%	

Table 15-19
Port Townsend-Keystone O-D Trip Table
Weekday PM Peak Period — Eastbound — In-Vehicle Boardings

ORIGIN	DESTINATION	South Whidbey Island	1215 Central Whidbey Island	North Whidbey Island	1715 Other West Snohomish County/Camano Island	1717 Other West King County	8 Anacortes/Fidalgo Island	6 Other West Skagit County	San Juan County	West Whatcom County	Vancouver, BC	721 All Other Places	Origin Totals	Origin Shares
Port Townsend	1701				9	3	9			3	3	3	28	16.1%
Other Northeast Jefferson County	1702		3	3		9			9		3		25	14.6%
Port Angeles	1703						3				3		5	3.1%
Sequim/Other East Clallam County	1704			3									3	1.5%
West Olympic Peninsula	1705						9	3					11	6.5%
Greater Bremerton	1707	3	5	11									19	10.8%
Other Central Kitsap County	1708			9									9	5.0%
South Kitsap County	1709	3											3	1.5%
Mason/West Pierce Counties	1710	3						3		3			8	4.6%
All Other Places	1724		35	15						13			63	36.4%
Destination Totals		8	43	39	9	11	20	5	9	19	8	3	172	100.0%
Destination Shares		4.6%	24.9%	22.6%	5.0%	6.5%	11.5%	3.1%	5.0%	10.8%	4.6%	1.5%	100.0%	

Figure 15-4
Port Townsend - Keystone Eastbound PM Peak Period
Trip Origins & Destinations by Boarding Mode



### 15.2.2 Sunday Survey Period Trip Patterns

Table 15-20 summarizes origin and destination locations for westbound Sunday survey period respondents and Figure 15-5 provides an illustration of the origin and destination locations for all boarding modes. In contrast to the weekday PM peak period results, there is a larger percentage of respondents with destinations in Clallam County, northeast Jefferson County, and the west Olympic Peninsula, rather than Port Townsend and Bremerton. These destinations confirm that Sunday respondents are predominately riding the ferry on social/recreational or sightseeing trips. The origins of these respondents were similar to those found during the PM peak period, with the majority originating in areas north of Whidbey Island and in north Whidbey Island, but there are more origins in central and south Whidbey Island. In comparison to the 1993 Sunday survey, it appears that a greater percentage of travel is originating on Whidbey Island, particularly south and central Whidbey Island. This also appears to be true for the Anacortes/Fidalgo Island area as well. Interestingly, destinations for respondents of the 1999 survey have changed considerably from north and central Kitsap County to northeast Jefferson and Clallam Counties and the west Olympic Peninsula area.

Table 15-21 summarizes eastbound origin and destination locations for all boarding modes for Sunday survey period respondents. Figure 15-6 illustrates these origin and destination locations. Eastbound travel largely originates in the Port Townsend, northeast Jefferson County, Clallam County, Port Angeles districts and the west Olympic Peninsula district. Again a large portion of destination locations are on Whidbey Island, but interestingly there is a significant percentage of destinations in Vancouver, B.C. and other areas in western Canada. Origins and destinations reported by respondents of the 1993 Sunday survey are similar to those found in 1999, but with a minor shift to northern origins and destination locations.

The westbound walk-on and in-vehicle boarding origin and destination locations are shown in Figure 15-7. As was found for PM peak period ridership, walk-on passengers have a smaller range of locations than do passengers who boarded in a vehicle. Interestingly, most westbound walk-on passengers reported an origin in north Whidbey Island, but have very dispersed destination locations. Those passengers who boarded in a vehicle typically originated in north Whidbey Island, Anacortes or southwest Skagit County. Destinations for respondents boarding in a vehicle tend to be in Port Townsend, Bremerton, and Sequim.

As can be seen in Figure 15-8, in the eastbound direction both walk-on and in-vehicle respondents show a clear pattern of clustering at Port Townsend as an origin location, with a moderate number of respondents reporting north or central Kitsap County as their origin. Destination locations, however, are considerably dispersed. Interestingly, most walk-on respondents reported destinations in south Whidbey Island and a few destinations in central Whidbey Island. Those ferry riders boarding in a vehicle have a general destination of Whidbey Island with moderate clustering in Anacortes and southwest Skagit County.

Table 15-20 Port Townsend-Keystone O-D Trip Table Sunday Survey Period — Westbound — All Boarding Modes

										0			
ORIGIN	DESTINATION	1201 Port Townsend	21 Co Other Northeast Jefferson County	1703 Port Angeles	50 Sequim/Other East Clallam County	1705 West Olympic Peninsula	90.1 Worth Kitsap County	Creater Bremerton	22 80 Other Central Kitsap County	66 South Kitsap County	UL Mason/West Pierce Counties	For the Places	Origin Shares
South Whidbey Island	1711	2.4%	1.6%				1.6%				1.6%		7.1%
Central Whidbey Island	1712		1.6%				0.8%				3.1%	1.6%	7.1%
North Whidbey Island	1713	2.4%	7.1%				0.8%	3.1%	3.1%	0.8%	2.4%	4.7%	24.4%
Other West Snohomish County/Camano Island	1715				1.6%						0.8%		2.4%
Other West King County	1717				0.8%								0.8%
Anacortes/Fidalgo Island	1718	1.6%		0.8%	4.7%	3.1%	2.4%	0.8%	1.6%		0.8%		15.7%
Other West Skagit County	1719	2.4%	3.1%		1.6%	1.6%		0.8%		0.8%	0.8%	1.6%	12.6%
San Juan County	1720		1.6%			0.8%					0.8%		3.1%
West Whatcom County	1721	0.8%	2.4%	0.8%	7.1%	4.7%							15.7%
Vancouver, BC	1722	1.6%			0.8%	0.8%							3.1%
Other Canada	1723										0.8%		0.8%
All Other Places	1724		1.6%		4.7%							0.8%	7.1%
Destination Shares		11.0%	18.9%	1.6%	21.3%	11.0%	5.5%	4.7%	4.7%	1.6%	11.0%	8.7%	100.0%

Figure 15-5
Port Townsend - Keystone Westbound Sunday Survey Period Trips
All Boarding Modes

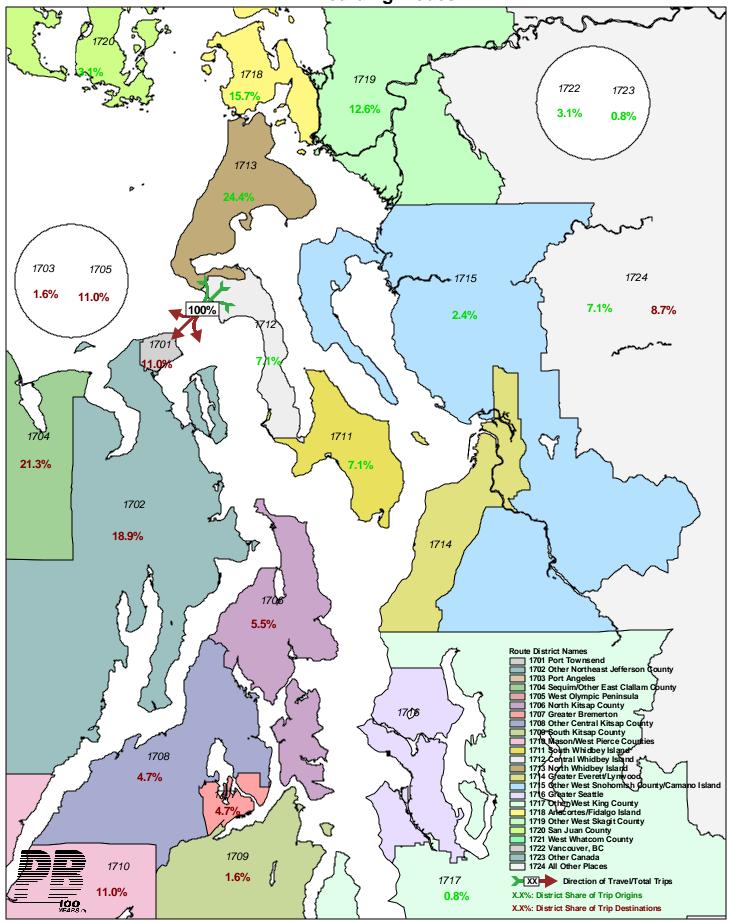


Table 15-21 Port Townsend-Keystone O-D Trip Table Sunday Survey Period — Eastbound — All Boarding Modes

		,											0				
ORIGIN	DESTINATION	1711 South Whidbey Island	717 Central Whidbey Island	North Whidbey Island	1714 Greater Everett/Lynnwood	1715 Other West Snohomish County/Camano Island	1716	Other West King County	8 Anacortes/Fidalgo Island	6 Other West Skagit County	San Juan County	1271 West Whatcom County	Nancouver, BC	Other Canada	All Other Places	All Other Places	Origin Shares
Port Townsend	1701	2.1%	1.4%	2.1%	2.4%	1.0%	0.3%		0.3%	0.7%		6.9%	6.2%	3.1%	1.4%	1.0%	27.7%
Other Northeast Jefferson County	1702	4.1%	0.7%	4.1%	1.4%	1.0%	0.7%	1.4%	2.4%	1.7%		6.2%	0.7%	1.0%			24.4%
Port Angeles	1703	1.0%	1.0%	1.4%		0.3%			1.4%	0.7%		2.1%			0.7%	0.3%	8.6%
Sequim/Other East Clallam County	1704	1.0%		0.3%			0.3%		1.4%	0.7%		3.1%	0.3%	0.3%	2.1%	2.1%	11.2%
West Olympic Peninsula	1705	0.3%	0.3%	0.7%		0.7%			1.0%	0.7%		1.4%	1.7%		0.3%	0.3%	7.3%
North Kitsap County	1706		0.3%	0.7%		0.3%			1.4%	0.7%	0.7%				0.3%	0.3%	4.6%
Greater Bremerton	1707			2.8%					0.7%	0.3%	0.3%						4.0%
Other Central Kitsap County	1708		1.7%	1.7%				0.7%	0.3%			0.3%					4.6%
South Kitsap County	1709	0.3%		0.7%													1.0%
Mason/West Pierce Counties	1710			1.0%		0.3%				0.7%	0.7%	0.7%	0.3%		0.3%	0.3%	4.3%
All Other Places	1724		0.3%	1.0%								0.7%	0.3%				2.3%
Destination Shares		8.6%	5.6%	15.8%	3.6%	3.6%	1.3%	2.0%	8.6%	5.9%	1.7%	20.5%	9.2%	4.3%	5.0%	4.3%	100.0%

Figure 15-6
Port Townsend - Keystone Eastbound Sunday Survey Period Trips
All Boarding Modes

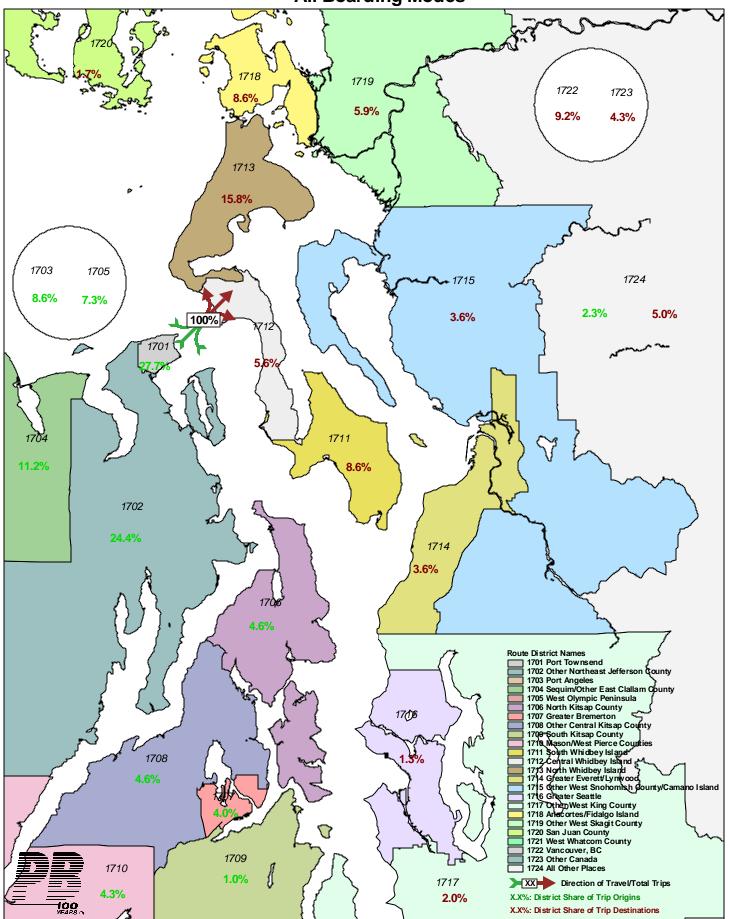


Figure 15-7
Port Townsend - Keystone Westbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

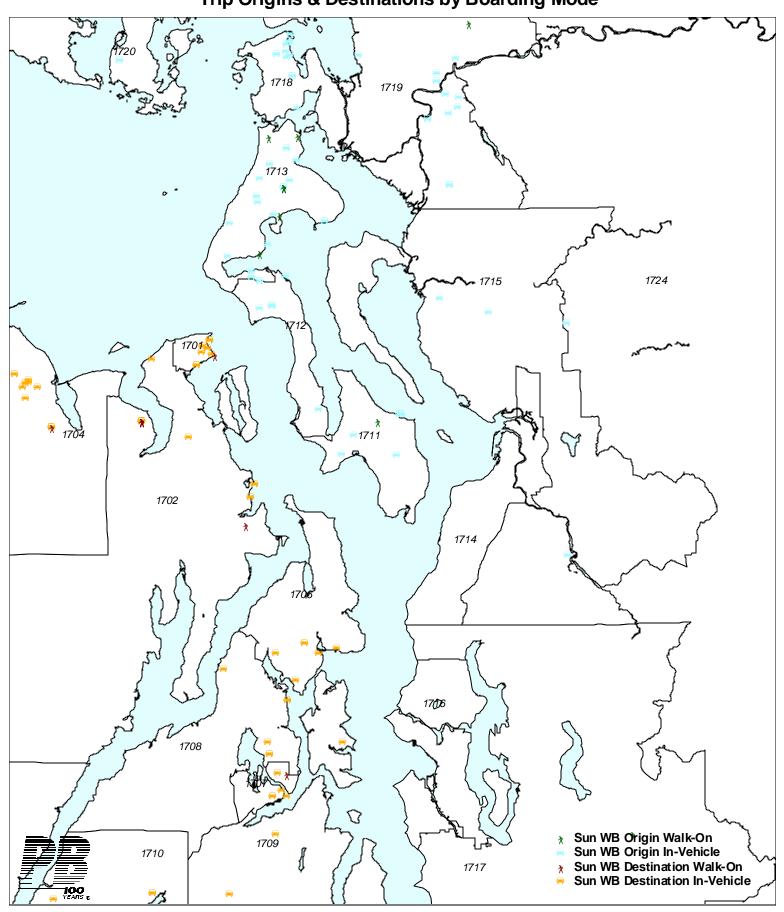


Figure 15-8
Port Townsend - Keystone Eastbound Sunday Survey Period
Trip Origins & Destinations by Boarding Mode

